From: "Novak, Madi" <Novak.Elisabeth@epa.gov>
To: "Michael PINTO" <michael.pinto@total.com>

CC: edodak@integral-corp.com

"Wardah Azhar" <azharw@cdmsmith.com>

"Peterson, Lance" <petersonle@cdmsmith.com>

"Young, Hunter" < Young. Hunter@epa.gov>

Date: 11/17/2020 6:33:27 AM

Subject: RE: Arkema Pre-Design Work Plan Response to Comments

Good Morning Mike,

I hope you don't mind an additional clarification. In response to Specific Comment 9b, LSS indicates a summary of the *Arkema Upland Level II Screening Ecological Risk Assessment* dated January 19, 2009 will be provided in Section 2.7 of the PDI WP. EPA understands that DEQ modified the Level II Screening Ecological Risk Assessment; therefore, the summary should be based on the on the Level II Screening Ecological Risk Assessment with DEQ's final modifications.

Please let me know if you have any questions.

Thank you, Madi

E. Madi Novak, Remedial Project Manager EPA Region 10, Superfund & Emergency Management Divison Oregon Operations Office 503-326-3277 She/Her/Hers

From: Young, Hunter < Young. Hunter@epa.gov> Sent: Monday, November 9, 2020 3:19 PM To: Michael PINTO < michael.pinto@total.com>

Cc: edodak@integral-corp.com; Wardah Azhar <azharw@cdmsmith.com>; Peterson, Lance

<petersonle@cdmsmith.com>; Novak, Elisabeth <Novak.Elisabeth@epa.gov>; Young, Hunter <Young.Hunter@epa.gov>

Subject: RE: Arkema Pre-Design Work Plan Response to Comments

Mike,

EPA has reviewed the October 27, 2020 response to comments (RTC) table addressing EPA's September 14, 2020 comments on the Draft Pre-Design Investigation Work Plan (PDI WP) for the Arkema Area. Most of the responses to EPA comments are acceptable; however, the following comments should be taken into consideration in the revised RTC/PDI WP:

- EPA reviewed the September 30,2020 meeting summary/tentative agreements provided by Integral on October 2, 2020 and provided the following comment to LSS in an email dated October 9, 2020; this comment requires a response in the revised RTC/PDI WP: Under sediment sampling approach, provide a rationale in the RTC for the absence of sediment cores in the downstream nearshore area (at RM-7). EPA notes that there has been no historic subsurface sampling in this area (see Figure 1-8c of the draft PDI WP).
- Responses provided to the following comments should be included in the revised PDI WP text: PDI WP Comments G6, S9 (first paragraph), S22, S32b, S38 (second sentence), S40, S41b, S48, S60, S61, and FSP Comment S15d.
- Responses provided to the following comments potentially reference inaccurate comment numbers and should be corrected to reference the accurate comment number (it appears a reference to G2 is appropriate): PDI WP

- Comments S23e, S33, S37, and FSP Comments S1 and S6.
- PDI WP Comment G1: The response is acceptable; however, EPA assumes that the intent of the second sentence is that Table 17 CULs will be used for leave surface characterization because it is unclear what it is meant by identifying "clean sediment".
- PDI WP Comment S6: EPA agrees with including benzene and TCE in the list of analytes for waste characterization; however, both these analytes have groundwater CULs and are not as hydrophobic as focused COCs (e.g., PCBs). EPA recommends also including benzene and TCE in the analyte list for the groundwater and porewater samples to the extent the data are relevant to cap design.
- PDI WP Comment S11a: As stated in the original EPA comment, the PDI WP should revise the discussion to include the locations and constituents in all known plumes. In the absence of this information the quoted text is unsubstantiated and must be removed from the PDIWP.
- PDI WP Comment S11c: Revise Section 1.3.2.1 text to state that the groundwater discharges have been largely
 curtailed because the complete curtailment of discharges still needs to be verified after the 2021 Groundwater
 Extraction Enhancement.
- PDI WP Comment S16: The response to this comment and other comments related to NAPL testing are acceptable; however, EPA will review the revised multiple lines of evidence approach in the PDI WP before making a final determination. It is unclear how much the revised approach relies on chemical analysis and EPA notes that visual identification and shake tests are adequate justification for the positive identification of NAPL in other project areas. Chemical analysis is useful to determine the constituents present in NAPL but are not required to determine presence of NAPL.
- PDI WP Comment S17: The response partially addresses the EPA comment. EPA expects that the discussion will also be expanded for areas beyond the area between the acid plant and top of bank, as requested by the original EPA comment.
- PDI WP Comment S31: EPA assumes that this response intends to state that low detection limits will be a priority for all COCs being analyzed and not just focused COCs. EPA acknowledges the difficulty in achieving low detection limits for dioxins/furans. EPA and DEQ are conducting an upriver study to inform dioxin/furan analysis at Portland Harbor.
- PDI WP Comment S32a: EPA expects that the PDI WP will discuss the rationale for starting subsurface sampling at 2-3 ft, depending on slope.
- PDI WP Comment S62: The response is acceptable; however, EPA notes that the groundwater flux measurements provide information on seepage rate and not contamination delineation.
- PDI WP Comment S71: EPA expects that a detailed discussion of target COCs will be added to the revised PDI WP. The discussion should include identification of target COCs in different sampling areas. This approach seems to be focused on delineating depth of contamination for dredge prisms and it is unclear if it is expected to collect the type of information required if the selected technology is capping and not dredging, especially considering the limited scope of porewater sampling. Since the technology assignments have not been determined yet, additional clarification on the sufficiency of this approach is required. Additionally, the use of target COCs is acceptable for streamlining the analysis of core sample intervals but cannot be used for other RD purposes.
- FSP Comment S22: The response is acceptable and the attached daily progress report from the US Mooring Project Area can be used as an example for EPA's expectations.
- QAPP Comment S9: EPA assumes this response intends to state that MDLs will be "below" RAL and PTW thresholds and not above.

Let me know if you have any questions.

Thanks,

From: Michael PINTO <michael.pinto@total.com>

Sent: Tuesday, October 27, 2020 3:14 PM **To:** Young, Hunter < Young. Hunter@epa.gov>

Cc: edodak@integral-corp.com

Subject: Arkema Pre-Design Work Plan Response to Comments

Hunter,

The attached table addresses EPA's comments on the Draft Pre-Design Investigation Work Plan for the Arkema Area submitted on June 18, 2020 by Legacy Site Services, agent for Arkema Inc.

LSS is looking forward to working with the EPA team to finalize the Arkema Project Area PDI work plan. Please let me know if you have any questions about this submittal. Thanks.

Michael Pinto RETIA USA LLC/Legacy Site Services LLC 665 Stockton Drive, Suite 110 Exton, PA 19341

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